To: Amoroso, Cathy[Amoroso.Cathy@epa.gov]; Adams, Glenn[Adams.Glenn@epa.gov]; Alexander, Shanna[Alexander.Shanna@epa.gov]
From: Richards, Jon M.[/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=4D977FDF9B7841CC999A219825434685-RICHARDS, JON]
Sent: Tue 12/21/2021 9:51:32 PM (UTC)
Subject: RE: ORR fish tissue data (not bear creek)

These all extremely low and I wouldn't change what I said based on these very very low levels
In a normal rad review I would call this negligible rad results, and meaning rads in fish are of no risk, and advise my rpm that no issues here
jon

From: Amoroso, Cathy <Amoroso.Cathy@epa.gov>
Sent: Tuesday, December 21, 2021 4:36 PM
To: Adams, Glenn <Adams.Glenn@epa.gov>; Richards, Jon M. <Richards.Jon@epa.gov>; Alexander, Shanna <Alexander.Shanna@epa.gov>
Subject: ORR fish tissue data (not bear creek)

I forwarded Courtney Thomason's (TDEC) fish tissue data pull. Below are the max fish tissue value (data 2005-2020) for each rad, along with the location of the max value. Not sure what to compare this with or how to use the data.

Radionuclide	max fish tissue conc 2005-2020 (oreis)	sample location of max fish tissue
H-3	6.11E+00	clinch river
C-14		
Cl-36		
Co-60	2.19E-01	Tenn river
Sr-90	1.17E+00	Clinch R m 19.7
Tc-99	3.70E-01	Clinch R m 19.7
I-129		
Cs-137	9.44E-01	Clinch R m 32
Eu-154		
Pb-210		
Ra-226		
Ra-228		
Th-228	5.20E-02	Clinch R m 32
Th-230	2.90E-02	Clinch R m 32
Th-232	3.00E-03	Clinch R m 32
U-233/U-234	3.60E-02	Clinch R m 32

U-235/U-236	7.00E-03	Tenn River
Np-237	1.80E-02	Clinch R m 32
U-238	3.20E-02	Tenn River
Pu-238	6.00E-03	Clinch R m 32
Pu-239	9.40E-02	Clinch R m 16
Am-241	3.90E-02	clinch R m 16

Cathy Amoroso, Chief
Restoration & DOE Coordination Section
Superfund & Emergency Management Division
U.S. EPA, Region 4
404-295-6758